

ABSTRACT

A method and apparatus for the manipulation and management process of cryogen such that it controls both the fluid body movement as well as internal currents within the cryogen. Small volumes of a desired substance introduced into this managed cryogen for the production of frozen or solidified pellets or granules are better managed as to shape, size, deformation, frozen satellites, fines and agglomeration and overall desired quality. These benefits result from the dispersion of the gas produced, as well as the heat transferred, resulting from the introduction of the relatively hot substance to the cryogen. The fluid body movement assists in maintaining a distance between the individual solidifying pellets or granules thereby minimizing deformation as a result of physical contact. The output characteristics and desired quality of the pellets can be more effectively controlled and managed, as desired.